USDA, National Agricultural Statistics Service

Indiana Crop & Weather Report

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CROP REPORT FOR WEEK ENDING APRIL 22

AGRICULTURAL SUMMARY

Planting of corn is finally underway in many areas across the state, according to the Indiana Field Office of USDA's National Agricultural Statistics Service. Late in the week, many farmers were able to resume fieldwork as soils had dried enough to support heavy equipment. Planting of corn is 8 days behind the average pace and 5 days behind last year. Substantial losses are being reported in the fruit, berry and grape crops due to freeze damage that occurred two weeks ago. Damage to winter wheat and alfalfa is still being assessed.

FIELD CROPS REPORT

There were 3.4 **days suitable for field work**. Four percent of the intended **corn** acreage has been **planted** compared with 8 percent last year and 17 percent for the 5-year average. By area, 5 percent has been planted in the north, 3 percent the central region, and 5 percent in the south.

Forty-six percent of the **winter wheat** acreage is **jointed** compared with 51 percent for last year and 57 percent for the 5-year average. Winter wheat **condition** is rated 28 percent good to excellent compared to 80 percent last year at this time. Some farmers have already begun tilling up wheat fields due to freeze and water damage.

Major activities during the week included: soil preparation, applying anhydrous ammonia, preparing planting equipment, spraying herbicides, hauling grain to market, hauling manure and taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 6% excellent, 48% good, 34% fair, 11% poor, and 1% very poor. Livestock are reported to be in mostly good condition. Pastures and feedlots have improved as the muddy conditions subside.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
	Percent			
Corn Planted	4	NA	8	17
Winter Wheat Jointed	46	33	51	57

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excel-lent
		Percent			
Pasture	1	11	34	48	6
Winter Wheat 2007	8	22	42	27	1
Winter Wheat 2006	1	2	17	63	17

SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

	This Week	Last Week	Last Year
	Percent		
Topsoil			
Very Short	0	0	0
Short	0	0	3
Adequate	71	40	66
Surplus	29	60	31
Subsoil			
Very Short	0	0	1
Short	1	0	6
Adequate	71	61	71
Surplus	28	39	22
Days Suitable	3.4	1.2	3.1

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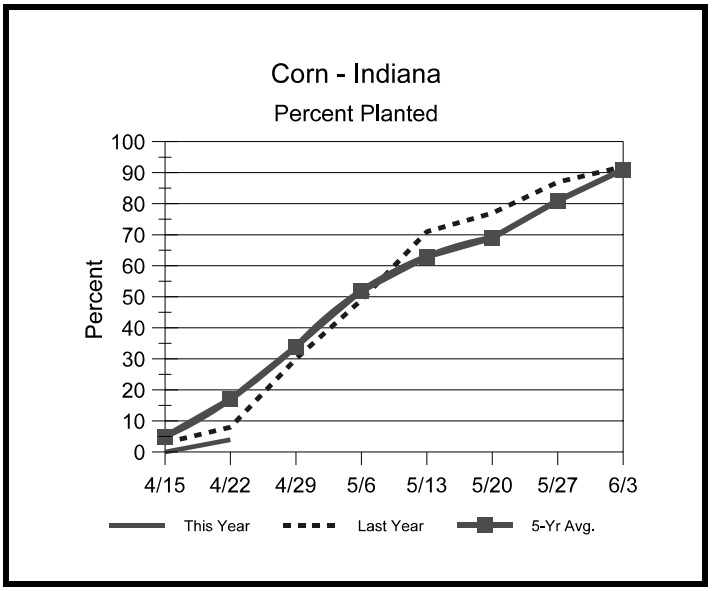
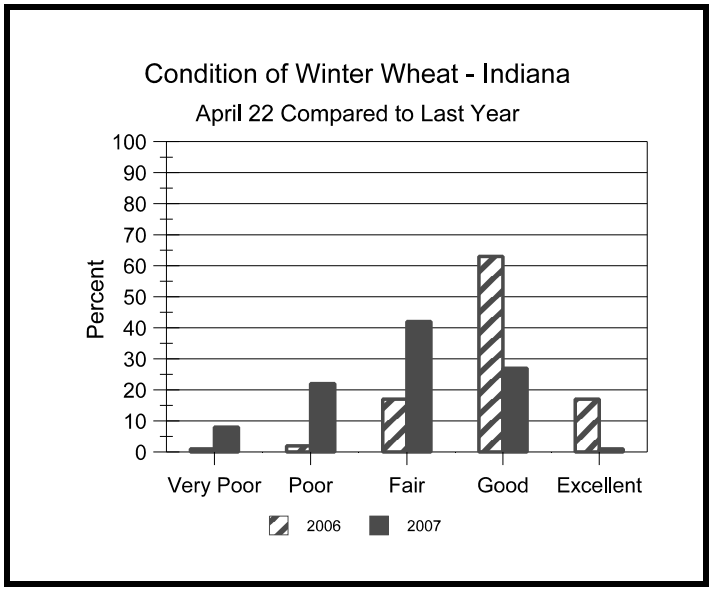
http://www.nass.usda.gov/Statistics_by_State/Indiana/

Crop Progress





Other Agricultural Comments And News

Considerations for Planting Corn into Damaged Fields of Wheat

Many folks are still assessing the condition of wheat fields damaged by the low temperatures of the past week. In some situations, additional damage to wheat has occurred from standing water in fields due to frequent rains this winter and spring. Some growers may decide replanting damaged wheat fields to corn is a viable economic option. Some of the key considerations for doing so are described in this article.

Killing the Remaining Stand of Wheat

For damaged wheat fields that will be planted to corn, complete and timely control of the existing wheat is more important than if planting to soybean. Corn is more sensitive to early-season weed competition than soybean. Living wheat plants are essentially weeds and can absorb nitrogen and make it unavailable for the corn plants during the same growing season.

Use of a glyphosate-based burndown program should include the use of glyphosate at 1.5 lb ae/A + 2.4-D at 1-2 pts/A. The herbicide 2,4-D is needed to control glyphosate-resistant marestail which is very prevalent in southern Indiana and help with control of emerged common lambsquarter and ragweed. Apply in a spray volume of 10 to 15 GPA and include AMS if you have hard water.

The other program for controlling an existing stand of wheat is a Gramoxone-based program. It may be advisable to consider the use of Gramoxone Inteon (3 to 4 pt/A) + atrazine (at least 1.5 lb ai/A) + 2,4-D(1 to 2 pt/A) if one desires to plant corn as soon as possible. This mixture is more expensive than glyphosate + 2,4-D, but could provide a more rapid burndown of the wheat and minimize the early-season competition between the remaining wheat and newly planted corn. Apply this mixture in 15 to 20 GPA of carrier volume. A rain 3-4 days after application can help move the atrazine into the roots of wheat to provide additional control. If the cold weather conditions continue or you do not get the rain forecast for this week, this mixture may be more desirable since the activity Gramoxone is less influence by temperature than glyphosate.

Regardless of whether you use a glyphosate or Gramoxone-based program, keep in mind that wheat is somewhat tough to kill in the spring during cold weather conditions and a follow up treatment may be necessary to completely control the existing wheat plants. It likely will not pay to use reduced herbicide rates. Also, it may be advisable to wait until we have a day or two of daytime air temperatures above 50ºF to get the maximum herbicidal activity out of the products.

Tillage Options

Tillage options for corn planted into damaged wheat fields have to be considered in light of trying to make the best out of a challenging situation. Some of the unique features about trying to establish corn into wheat versus soybean or corn stubble from the previous year are that wheat may have negatively affected the soil physical (moisture and temperature) and chemical (nitrogen availability and potential allelopathic substances) environment for corn.

Just how well corn will perform depends on the quantity of wheat biomass cover, soil conditions, and the weather conditions following wheat kill or incorporation and subsequent corn planting. We don't have much experience with spring tillage options for corn following wheat cover crops, but we know from previous research with corn following wheat and rye cover crops in Ontario (Raimbault et. al., 1990; Raimbault et. al., 1991; Tollenaar et. al., 1993) that there are some things we can do to help corn get off to a good start.

Early Kill for No-till Corn. If you are intending on no-till, chemically kill the wheat as soon as the decision has been made to plant the field to corn (see herbicide recommendations above). Early kill reduces further soil moisture loss from the seedbed zone, starts the wheat decomposition process sooner, limits further wheat dry matter production, and may reduce the presence of any allelopathic substances. Although we wouldn't recommend delaying corn planting past the optimum date range, allowing some time after the chemical kill of the wheat before planting corn will be helpful to the early corn establishment from the perspective of soil moisture/temperature and potentially harmful insects (see the insect section on Page 4).

Row Cleaners for No-till Corn. Row cleaner attachments for the corn planter are even more helpful for no-till corn into decaying wheat residues than they are for no-till corn after soybean or wheat stubble from a previous year. Set the row cleaners aggressively. It may be helpful to remove a bit of soil in the row rather than just simply trying to brush aside decaying wheat plants. Simple coulters ahead of seed openers are not as effective as row cleaners when seeding corn following cereal cover crops (Raimbault et. al., 1991).

(Continued on Page 4)

Weather Information Table

Week ending Sunday April 22, 2007

Station	Past Week Weather Summary Data							Accumulation				
								April 1, 2007 thru April 22, 2007				
	Air Temperature				Precip.		Avg 4 in Soil	Precipitation			GDD Base 50°F	
	Hi	Lo	Avg	DFN	Total	Days	Temp	Total	DFN	Days	Total	DFN
Northwest (1)												
Chalmers_5W	77	30	50	-4	0.09	1		2.14	-0.45	7	42	-25
Francesville	75	29	50	-1	0.03	1		1.74	-0.98	6	36	-11
Valparaiso_AP_I	75	30	50	+0	0.00	0		0.70	-2.21	3	40	-4
Wanatah	76	27	49	-1	0.02	1	52	1.44	-1.35	5	27	-5
Winamac	76	30	50	-2	0.04	1	48	1.88	-0.84	5	31	-16
North Central(2)												
Plymouth	76	29	49	-4	0.03	1		2.77	-0.06	8	30	-22
South_Bend	75	27	51	+2	0.00	0		1.54	-1.31	7	44	+7
Young_America	76	31	51	+1	0.00	0		1.71	-0.80	5	49	+4
Northeast (3)												
Columbia_City	74	30	49	+0	0.00	0	45	1.36	-1.30	5	30	+0
Fort_Wayne	73	32	50	+0	0.00	0		1.99	-0.50	8	46	+5
West Central(4)												
Greencastle	76	31	50	-5	0.00	0		3.07	+0.42	6	49	-28
Perrysville	77	33	52	+0	0.03	1	52	2.54	-0.29	7	62	+1
Spencer_Ag	77	32	50	-4	0.00	0		2.96	+0.08	6	51	-15
Terre_Haute_AFB	75	33	52	-3	0.00	0		2.48	-0.31	6	66	-13
W_Lafayette_6NW	76	32	52	+1	0.22	1	50	2.39	-0.28	8	52	+4
Central (5)												
Eagle_Creek_AP	75	35	52	-2	0.14	2		3.54	+0.87	9	68	-3
Greenfield	73	32	50	-3	0.50	3		3.47	+0.57	12	55	+1
Indianapolis_AP	75	35	53	-2	0.09	2		2.92	+0.25	9	72	+1
Indianapolis_SE	74	32	50	-4	0.17	2		3.72	+1.05	9	57	-7
Tipton_Ag	73	30	49	-2	0.01	1	50	2.25	-0.59	7	43	+7
East Central (6)												
Farmland	74	24	48	-3	0.00	0	48	2.50	-0.11	6	36	+3
New_Castle	73	32	49	-2	0.17	1		3.06	+0.11	6	52	+16
Southwest (7)												
Evansville	76	37	55	-3	0.00	0		3.10	+0.19	6	101	-30
Freelandville	76	35	53	-2	0.00	0		1.88	-0.87	6	81	-10
Shoals	78	31	51	-5	0.00	0		4.37	+1.43	6	69	-21
Stendal	78	36	57	+1	0.00	0		3.87	+0.65	6	117	+9
Vincennes_5NE	78	35	54	-1	0.00	0	51	2.21	-0.54	6	77	-14
South Central(8)												
Leavenworth	77	36	53	-3	0.00	0		4.30	+0.92	6	86	-8
Oolitic	77	32	51	-4	0.00	0	51	3.26	+0.37	6	59	-16
Tell_City	78	39	55	-2	0.00	0		3.00	-0.53	6	99	-17
Southeast (9)												
Brookville	78	33	52	+0	0.11	1		2.40	-0.35	6	76	+23
Greensburg	76	33	52	-2	0.32	2		3.06	+0.14	8	81	+15
Scottsburg	79	31	52	-3	0.03	1		3.98	+0.92	7	81	-10

DFN = Departure From Normal (Using 1961-90 Normals Period).
GDD = Growing Degree Days.
Precipitation (Rainfall or melted snow/ice) in inches.
Precipitation Days = Days with precip of .01 inch or more.
Air Temperatures in Degrees Fahrenheit.

The above weather information is provided by AWIS, Inc.
For detailed ag weather forecasts and data visit the AWIS home page at
www.awis.com

Early Tillage for Conventional-till Corn. If the objective is to use tandem disks or combination tillage tools to establish your seedbed, try to till at least a week in advance of corn seeding to help reduce the negative effects due to potential allelopathic (plant toxic) substances that may be released with the high volumes of decomposing wheat.

Seedbed Optimization for Conventional-till Corn. It is essential to avoid soil compaction from working the soil when it is excessively wet and to avoid seedbed moisture loss to the extent that it is possible. Moisture evaporation from the soil surface will be slower from beneath a wheat canopy than it would be from a bare soil. Try to reduce tillage depth and to leave the seedbed in as firm a condition as possible to help retain moisture in the seedbed zone.

Pre-plant N Application for Both No-till and Conventional-till Corn. As the dead wheat plants decompose (and incorporation by tillage will speed up that process), soil N availability to corn may be reduced even if the wheat has already received its optimum rate of N fertilizer. It may be helpful to ensure adequate N availability to the young corn crop by adding N in starter fertilizer, and by applying additional pre-plant N to meet the normal recommended N requirement for the 2007 corn crop.

Credits for Nitrogen Fertilizer Applied to Wheat

Some of the nitrogen (N) fertilizer applied to wheat that may subsequently be abandoned due to freeze damage could be available to a replacement corn crop. Very little N will have been taken up by the wheat plant prior to the freeze damage (< 25 lb N/ac at jointing), so most of the N carryover to corn will be determined by how much nitrate N is retained in the soil.

Losses from 28% UAN applied to wheat will be higher than typically experienced with pre-plant anhydrous ammonia for corn in early spring. Predicting how much N is carried over is difficult because it depends on when the N was applied, the soil type, and the weather from now through early June. Warm and wet weather, especially heavy rainfall resulting in leaching on sandy soils or ponding on heavy soils, will cause the most N loss. Losses of 28% applied to wheat may range from 30 to 50%, but could be higher or lower depending on the remaining spring weather.

One way to get a somewhat better estimate of N carryover to corn is to collect soil cores to a depth of one foot and send them to a commercial soil testing laboratory to have them analyzed for nitrate-N. The closer to sidedressing this is done the better. Standard recommendations suggest sampling when corn is at the four to six leaf stage; hence it is called the presidedress soil nitrate test or PSNT (Brouder & Mengel, 2003). Soil samples need to be dried before mailing to the laboratory

Results of the soil nitrate test are typically reported in parts per million (ppm) or milligrams per kilogram (mg/kg) which are equivalent in value. If more than 25 ppm nitrate-N are found in the sample then no additional N is recommended. At lower levels of nitrate-N, adjustments can be made to sidedress N rates. If little nitrate-N is found it might indicate that ammonium form of N had not yet been converted to the nitrate form as well as indicating loss of nitrate-N from the root zone so some interpretation of the results is needed.

Insect Management Issues

Planting into freeze-damaged wheat (or any existing crop) can present some unique insect challenges. The main issue involves the insects feeding upon the remnants of the dying crop. There are insects feeding in the early-season wheat that will also attack corn - the main ones being armyworm, brown stink bug, and black cutworm. All are early-season pests that feed on a wide variety of plants, including corn (this is why weedy fields are often problematic in terms of black cutworm infestations). These insects will continue to feed happily on wheat that is not completely dead, and are capable of transitioning to any other food source that comes along.

Producers must avoid the worst case scenario of dying wheat in the presence of germinating corn by ensuring that the wheat crop is completely dead before the corn germinates. This means killing the wheat with an herbicide (such as glyphosate) and then allowing it time to die completely - as long as 2 weeks - before corn begins to germinate. The temptation is to apply the herbicide treatment and replant within the same day or two, but this sets up a “perfect storm” for insects that will be plentiful and hungry as the wheat begins to die. Growers should aim to have a period where there is no “green” plant material in the field for a few days to allow these pests to either move out of the field in search of other food sources, or die of starvation.

In order to view the listing of “Related References” for this article, go to: http://www.entm.purdue.edu/extension/pestcrop/2007/issue3/index.html

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